

## cet-is - Feature #22181

### Packaging gibuu 2019

03/21/2019 11:10 AM - Christopher Backhouse

<b>Status:</b>	Assigned	<b>Start date:</b>	03/21/2019
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Christopher Backhouse	<b>% Done:</b>	0%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>		<b>Spent time:</b>	0.00 hour
<b>Scope:</b>	Internal	<b>SSI Package:</b>	
<b>Experiment:</b>	NOvA	<b>Co-Assignees:</b>	

#### Description

Back in 2017 you created a ups product for the gibuu neutrino generator that has been very helpful.

There is now a 2019 release available that we would like to update to.

I've experimented locally, and just grabbing all the tarballs here (including RootTuple, which we'll want)  
<https://gibuu.hepforge.org/trac/wiki/download#Downloadastarballs>  
and typing 'make' in the release2019 directory seems to work.

Hopefully this is very similar to how the v2016 product was made, and so should require minimal changes to the scripting. Unfortunately I don't have access to my old emails anymore, so I can't check the details.

#### History

##### #1 - 03/21/2019 11:24 AM - Lynn Garren

gibuu was packaged for NOvA by Kanika Sachdev <[ksachdev@fnal.gov](mailto:ksachdev@fnal.gov)>

These [instructions](#) are a useful starting point.

```
git clone ssh://p-build-framework@cdcvns.fnal.gov/cvs/projects/build-framework-gibuu-ssi-build gibuu-ssi-build
```

##### #2 - 03/28/2019 01:29 PM - Christopher Backhouse

Could you add me as a developer of that project?

##### #3 - 03/28/2019 01:33 PM - Lynn Garren

Done. Can we also assign this issue to you?

##### #4 - 03/28/2019 01:35 PM - Christopher Backhouse

Hmm, I still can't clone...

##### #5 - 03/28/2019 01:35 PM - Lynn Garren

I think there is a wait time until permission changes take effect.

##### #6 - 04/01/2019 10:32 AM - Christopher Green

- Assignee set to Christopher Backhouse

- Status changed from New to Assigned

##### #7 - 04/23/2019 04:37 AM - Christopher Backhouse

OK, I have this packaged to my satisfaction and available at [cvmfs/nova.opensciencegrid.org/externals/gibuu/](https://cvmfs.nova.opensciencegrid.org/externals/gibuu/). It's not clear to me that the scripts in the repository (that I updated for v2019) are quite right - the ssibuildshims bootstrapping in particular doesn't seem to work.

##### #8 - 04/23/2019 09:24 AM - Lynn Garren

Please explain what you mean by "the bootstrap script does not seem to work". Did you then download the code by hand? I'm having a look and not seeing a problem.

**#9 - 04/23/2019 09:37 AM - Christopher Backhouse**

In fact, it looks like bootstrap.sh works fine.

In build\_gibuu.sh, if I pass the same path I gave to bootstrap.sh then ssibuildshims sets up, but nothing else works. If I pass \$THAT\_DIR/gibuu/ then ssibuildshims fails but a manual setup ssibuildshims v0\_16\_00 gets past it, and then everything else works.

Do I need to append a /gibuu to %[pkgdir] (where?) or have bootstrap.sh somehow unpack things one level higher?

**#10 - 04/23/2019 10:06 AM - Lynn Garren**

First, I apologize for not realizing that you needed a modern ssibuildshims. It should be updated, but we also need to update some of the boilerplate in the scripts at the same time. I believe that updating ssibuildshims will resolve the path problem. But so that we can verify that, are you using a relative path from the build script or a full path starting with /?

**#11 - 04/23/2019 10:09 AM - Christopher Backhouse**

I'm using a full path, but only because a relative path seemed to cause problems.

**#12 - 04/23/2019 12:23 PM - Lynn Garren**

I've updated everything to use the latest ssibuildshims release. That involved editing the table file. I think the old ssibuildshims was causing unintended confusion.

The ssibuildshims scripts are designed to use a full path for the product directory. This is partly because ups needs the full path. That said, the use of readlink appears to translate a relative path into a working product\_dir. However, the best way to get the proper path involves a cd to the directory followed by pwd. Where supported, you can use pwd -P to resolve symbolic links.

**#13 - 04/29/2019 10:53 AM - Christopher Backhouse**

Sorry, I need to make one more change: adding the withROOT=1 option to the build to get a feature we want. I committed that to git. But things still don't run properly for me.

At the end of bootstrap.sh I get

```
calling ssibuildshims/v1_04_13/bin/make_source_code_tarball
-bash: ssibuildshims/v1_04_13/bin/make_source_code_tarball: No such file or directory
```

Then running build\_gibuu.sh I get

```
Error encountered when setting up product: ssibuildshims
ERROR: No instance matches were made between the
version file (/var/tmp/gibuu/ssibuildshims/v1_04_13.version) and the
table file (ssibuildshims.table) for flavor (NULL) and qualifiers ()
ERROR: Possible UPS database (/var/tmp/gibuu) corruption in product 'ssibuildshims'.
ERROR: Product 'ssibuildshims' (with qualifiers ''), has no v1_04_13 version (or may not exist)
ERROR: failed to setup ssibuildshims v1_04_13
```

It looks like it doesn't pick up the ssibuildshims the bootstrap put inside by product directory. I can't set up ssibuildshims v1\_04\_13 manually, since the latest version ups list can find for me is v0\_16\_00.

**#14 - 05/01/2019 07:26 AM - Christopher Backhouse**

How do you setup ups at the start of the whole process? That's the only point where I can possibly be doing something nonstandard.

**#15 - 05/01/2019 09:48 AM - Lynn Garren**

source <products>/setup

**#16 - 05/01/2019 09:51 AM - Christopher Backhouse**

I still get the same errors. This is my entire sequence of steps.

```
source /cvmfs/nova.opensciencegrid.org/externals/setup
mkdir /var/tmp/gibuu
./bootstrap.sh /var/tmp/gibuu/
./build_gibuu.sh /var/tmp/gibuu/ e15
```

**#17 - 05/01/2019 10:49 AM - Lynn Garren**

I see the problem. When you make a new products directory, you need to copy in a .upsfiles directory.

```
cp -pr /cvmfs/nova.opensciencegrid.org/externals/.upsfiles /var/tmp/gibuu/
```

**#18 - 05/01/2019 11:10 AM - Christopher Backhouse**

That did the trick!

Should bootstrap.sh create that directory itself? It doesn't look very complicated.

The scripts should at least refuse to continue without it.

**#19 - 05/01/2019 11:23 AM - Lynn Garren**

Actually, most of our work is done with existing local product directories. It could be somewhat disastrous to have any bootstrap script attempt to create the product directory. Also, we often work with sets of products that depend on each other. Having a single directory per product is counter productive. However, checking to see if .upsfiles exists is useful. We will consider that option. I should note that you can either copy in .upsfiles or install ups in the local products directory. If you install ups, you will automatically get a .upsfiles directory.

**#20 - 05/01/2019 02:18 PM - Lynn Garren**

The check for .upsfiles needs to be in each bootstrap script. I've added it to the gibuu bootstrap.sh.

There is another problem, however. If you are building against root, root needs to be setup by the gibuu ups table file.